

FORD F-150 LIGHTNING

TECHNICAL SPECIFICATIONS



2024 F-150 Lightning Flash.

BODY

Construction/materials	High-strength steel frame, high-strength, military-grade aluminum alloy body and bed
Body style	SuperCrew® four-door with 5.5-foot bed
Final assembly location	Rouge Electric Vehicle Center

POWERTRAIN/DRIVETRAIN

	Standard-Range Battery	Extended-Range Battery
Drivetrain Layout	Dual eMotor, front/rear transverse mounted, four-wheel drive	
Motors/configuration	Two inboard three-phase fixed magnet AC motors	
Targeted Peak Power (hp/kW) ¹	452/337	580/433
Targeted Peak Torque (lb.-ft./Nm) ¹	775/1050	775/1050

Motor assembly location² Van Dyke Transmission Plant

¹Calculated via peak performance of the electric motors at peak battery power. Your results may vary. Horsepower and torque are independent attributes and may not be achieved simultaneously.

²Assembled in the USA with domestic and foreign parts.

BATTERY/ENERGY STORAGE

	Standard-Range Battery	Extended-Range Battery
Battery type	Lithium-ion pouch with internal battery management, liquid cooled	
Battery size	98 kWh of usable energy ³	131 kWh of usable energy ³
Onboard charger power (input/output)	11.3 kW/10.5 kW (48A)	19.2kW/17.6 kW (80A) Fleet Only
Battery assembly location ⁴	Rawsonville Components Plant	

³Based on manufacturer calculation using computer engineering simulations. Your results may vary.

⁴Assembled in the USA with domestic and foreign parts.

ESTIMATED CHARGE TIMES⁵

	Standard-Range Battery	Extended-Range Battery
LEVEL 3		
15-80% DCFC (150kW+)	32 minutes	38 minutes
LEVEL 2		
80A Ford Charge Station Pro 15-100%	10 hours	13 hours
48A Connected Charge Station 15-100%		
30A/240V Mobile Charger 15-100%	15 hours	20 hours

⁵Range and charge time based on manufacturer computer engineering simulations and EPA-estimated range calculation methodology. The charging rate decreases as battery reaches full capacity. Your results may vary based on peak charging times and battery state of charge. Actual range varies with conditions such as external environment, vehicle maintenance, high-voltage battery age and state of health.

APPROXIMATE MILES/CHARGE⁶

	Standard-Range Battery	Extended-Range Battery
10 minutes, 150kW DC Fast Charge	62 miles	65 miles
1 hour, 80A Ford Charge Station Pro ⁷	20 miles	20 miles
1 hour, 48A Ford Connected Charge Station ⁷	20 miles	20 miles
1 hour, 30A/240V Mobile Charger	13 miles	13 miles

⁶EPA-estimated driving range based on full charge. Actual range varies with conditions such as external environment, vehicle use, vehicle maintenance, and high-voltage battery age and state of health.

⁷Excludes Platinum models.

EPA-ESTIMATED RANGE⁸

240

320 (Flash, Lariat)/300 (Platinum)

⁸EPA-estimated driving range based on full charge. Actual range varies with conditions such as external environment, vehicle use, vehicle maintenance, and high-voltage battery age and state of health.



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CHARGING UNIT

	Standard-Range Battery	Extended-Range Battery
30A Ford Mobile Charger (120V/240V)	Optional/Available Ford Accessory	Optional/Available Ford Accessory
48A Ford Connected Charge Station	Available Ford Accessory	Available Ford Accessory
80A Ford Charge Station Pro with Ford Intelligent Backup Power Capability ¹	Available Ford Accessory	Available Ford Accessory

¹When home is properly equipped.

EXTERIOR DIMENSIONS (Preproduction estimates. Measurements in inches unless otherwise noted.)

Wheelbase	145.5
Overall length	232.7
Cab height	78.3
Width - excluding mirrors	80.0
Width - including standard mirrors	96.0
Width - standard mirrors folded	83.6
Track width - front (curb)	68.1
Track width - rear (curb)	68.3
Overhang - front	37.8
Overhang - rear	49.4
Angle of approach (degrees)	24.3
Angle of departure (degrees)	24.0
Ramp breakover angle (degrees)	17.6
Ground clearance	8.5
Open tailgate to ground	37.1
Front bumper to back of cab	155.9
Front trunk liftover height	34.5

INTERIOR DIMENSIONS (Preproduction estimates. Measurements in inches unless otherwise noted.)

Seating (occupants)	5
Front headroom	40.8
Front legroom SAE (maximum)	43.9
Front shoulder room	66.7
Front hip room	62.5
Rear headroom	40.4
Rear legroom SAE (maximum)	43.6
Rear shoulder room	66.0
Rear hip room	62.6

BED & FRONT TRUNK CAPACITIES (Measurements in inches unless otherwise noted.)

Inside length (at floor)	67.1
Width between wheelhouses	50.6
Inside height	21.4
Cargo box volume	52.8 cubic feet
Front trunk volume	14.1 cubic feet (400 liters)

CAPABILITY²

	Standard-Range Battery	Extended-Range Battery
Maximum Payload (lbs.)	2,235 ²	1,913 ³
Maximum Towing (lbs.)	5,000 ⁴	7,700 ⁴
Maximum Towing with Max Trailer Tow Package (lbs.)	7,700 ⁴	10,000 (Flash/Lariat)/8,500 (Platinum) ⁴

²Towing and payload are independent attributes and may not be achieved simultaneously. Max payload available on F-150 Lightning[®] Pro and standard-range battery. When properly equipped. Max payload varies and is based on accessories and vehicle configuration. See label on doorjamb for carrying capacity of a specific vehicle. Always properly secure cargo.

³Towing and payload are independent attributes and may not be achieved simultaneously. Max payload available on F-150 Lightning[®] Flash. When properly equipped.

Max payload varies and is based on accessories and vehicle configuration. See label on doorjamb for carrying capacity of a specific vehicle. Always properly secure cargo.

⁴Max towing varies based on cargo, vehicle configuration, accessories, and number of passengers.

SUSPENSION

Front configuration	Independent double-wishbone with coil-over shocks, stabilizer bar with heavy-duty gas pressurized monotube shocks
Rear configuration	Independent semi trailing arms, coil springs, stabilizer bar with heavy-duty gas pressurized twin tube shocks

SELECT STANDARD/OPTIONAL FEATURES

	Pro	XLT	Flash	Lariat	Platinum
BATTERY/CHARGING					
Standard-Range Battery	S	S	-	-	-
Extended-Range Battery	O (Fleet only)	-	S	S	S
EXTERIOR FEATURES					
Power up/down hood	S	S	S	S	S
Front trunk	S	S	S	S	S
Tailgate with lift assist	S	S	-	-	-
Power up/down tailgate	-	-	S	S	S
Carbon Black fixed extended running boards	-	S	S	S	S
Power deployable running boards	-	-	-	-	O
EXTERIOR LIGHTING					
LED projector headlamps with dynamic bending and LED signature lighting	S	S	S	S	S
LED taillamps	S	S	S	S	S
Signature front light bar	-	S	S	S	S
Signature tailgate lighting	-	-	S	S	S
LED box lighting with Enhanced Zone Lighting	-	-	S	S	S
WHEELS					
18-inch machined aluminum with black high gloss pockets	S	-	-	-	-
20-inch Dark Carbonized Gray aluminum	-	S	S	S	-
22-inch bright machined aluminum with Ebony Black painted pockets	-	-	-	-	S
22-inch matte black wheels (w/ Black lug nuts)	-	-	-	-	O
TECHNOLOGY					
SYNC® 4 with Enhanced Voice Recognition, 12-inch landscape LCD capacitive touch screen	S	S	-	-	-
SYNC® 4A with Enhanced Voice Recognition, 15.5-inch portrait orientation LCD capacitive touch screen	-	-	S	S	S
Wireless Apple CarPlay® and Android Auto™ compatibility	S	S	S	S	S
Over-The-Air Software Updates	S	S	S	S	S
Connected Built-In Navigation¹ (3-year trial)	S	S	S	S	S
12-inch Digital Productivity Screen	S	S	S	S	S
Intelligent Access	-	-	S	S	S
Push button start	S	S	S	S	S
360-degree camera	O	S	S	S	S
FordPass® Connect with 4G LTE Wi-Fi hotspot capability for up to 10 devices	S	S	S	S	S
Phone As A Key functionality	-	-	-	S	S

¹Navigation services require SYNC®4 and FordPass Connect (optional on select vehicles), complimentary Connected Service and the FordPass app (see FordPass Terms for details). Eligible vehicles receive a complimentary 3-year trial of navigation services that begins on the new vehicle warranty start date. Customers must unlock the navigation service trial by activating the eligible vehicle with a FordPass member account. After the complimentary trial, the connected navigation service will terminate, and the system will revert to embedded offline navigation. Service contract is required for connected navigation services. Connected service and features depend on compatible AT&T network availability. Evolving technology/cellular networks/vehicle capability may limit functionality and prevent operation of connected features. FordPass App, compatible with select smartphone platforms, is available via a download. Message and data rates may apply.

Android Auto is a trademark of Google LLC.

Apple CarPlay is a trademark of Apple Inc., registered in the U.S. and other countries.

SELECT STANDARD/OPTIONAL FEATURES (CONTINUED)

	Pro	XLT	Flash	Lariat	Platinum
FORD CO-PILOT360® TECHNOLOGY¹					
Ford Co-Pilot360® 2.0 – Pre-Collision Assist with Automatic Emergency Braking (includes Pedestrian Detection, Forward Collision Warning and Dynamic Brake Support), BLIS® with Cross-Traffic Alert, with Trailer Coverage, Lane-Keeping System (includes Lane-Keeping Alert, Lane-Keeping Aid and Driver Alert), Rear View Camera, Auto High Beam headlamps, Reverse Sensing System, Reverse Brake Assist, and Post-Collision Braking	S	S	S	S	S
Ford Co-Pilot360® Assist 2.0 – Intelligent Adaptive Cruise Control with Stop-and-Go, Lane Centering and Speed Sign Recognition, Evasive Steering Assist, Intersection Assist	-	-	S	S	S
¹ Driver-assist features are supplemental and do not replace the driver's attention, judgment and need to control the vehicle. It does not replace safe driving. See Owner's Manual for details and limitations.					
FORD BLUECRUISE: HANDS-FREE HIGHWAY DRIVING²					
Ford BlueCruise Equipped (3 Year Plan): Hands-Free Highway Driving	-	-	O	O	O
Ford BlueCruise Equipped (90 Day Trial): Hands-Free Highway Driving	-	-	S	S	S
² Available Feature. Ford BlueCruise requires a Connected Service plan, FordPass® App, and modem activation. Equipped Ford vehicles come with either a 90-day trial or a 3-year BlueCruise Connected Service plan, after which purchase is required. See ford.com/bluecruise for more details. BlueCruise driver-assist features are supplemental and do not replace safe driving or driver's attention, judgment and need to control the vehicle. Only remove hands in a Hands-Free Blue Zone. Always watch the road and be prepared to resume control. See Owner's Manual for details and limitations.					
B&O® Sound System by Bang & Olufsen® with HD Radio™ (8 speakers with subwoofer)	-	-	S	S	-
B&O® Unleashed Sound System by Bang & Olufsen® with HD Radio™ (14 speakers with subwoofer)	-	-	-	-	S
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Rain-Sensing Wipers	-	-	-	S	S
SEATING					
Vinyl heated front bucket seats, 4-way manual driver/passenger	S	-	-	-	-
Cloth heated front bucket seats, 8-way power driver's seat with power lumbar, manual passenger lumbar	-	S	-	-	-
Cloth heated front bucket seats, 10-way power driver's seat with power lumbar, multi-adjustable power front passenger seat	-	-	S	-	-
ActiveX-trimmed, heated and ventilated front seats, 10-way power driver's seat and multi-adjustable power passenger seat with power lumbar, memory driver's seat	-	-	-	S	-
Premium Nirvana leather seating surfaces with black tuxedo stripes, heated and ventilated, 10-way power driver's seat and multi-adjustable power passenger seat with power lumbar, memory driver's seat	-	-	-	-	S
Flow-through console with stowable floor shifter	S	S	S	S	S

SELECT STANDARD/OPTIONAL FEATURES (CONTINUED)

	Pro	XLT	Flash	Lariat	Platinum
PRODUCTIVITY/CAPABILITY					
2.4kW Pro Power Onboard – 120V outlets: Two in the cab, two in the bed and four in the front trunk	S	S	S	S	-
9.6kW Pro Power Onboard – 120V outlets: Two in the cab, four in the bed and four in the front trunk, plus a 240V outlet in the bed	O	O	O	O	S
Interior work surface	-	S	S	S	S
Tailgate step (includes Tailgate Work Surface)	O	O	S	S	S
Class IV trailer hitch	S	S	S	S	S

SAFETY/SECURITY

AdvanceTrac® with RSC (Roll Stability Control™)	S	S	S	S	S
Airbags – Driver and front-passenger front and seat-mounted side airbags, Safety Canopy® side-curtain airbags	S	S	S	S	S
Curve Control	S	S	S	S	S
Perimeter anti-theft alarm	S	S	S	S	S
SOS Post-Crash Alert System	S	S	S	S	S
Tire pressure monitoring system	S	S	S	S	S
Advanced Security Pack	-	-	-	S	S
SecuriCode® keyless entry keypad	-	S	S	S	S
FordPass® Trailer Theft Alert¹	S	S	S	S	S

¹FordPass Connect (optional on select vehicles), the FordPass App., and complimentary Connected Service are required for remote features (see FordPass Terms for details). Connected service and features depend on compatible AT&T network availability. Evolving technology/cellular networks/vehicle capability may limit functionality and prevent operation of connected features. Connected service excludes Wi-Fi hotspot.

PACKAGES

Tow Technology Package – includes Pro Trailer Backup Assist, Trailer Reverse Guidance, Smart Hitch, On-board Scales, (included on Pro; standard on XLT+)	O	S	S	S	S
Max Trailer Tow Package (Includes Trailer Brake Controller)	O	O	O	O	S
Platinum Black Package (Limited Edition) – includes 3M® Matte Black Vinyl wrap, 22-inch matte black wheels (w/ Black lug nuts), smoked signature light bar, black Ford oval badging, reflective black-on-black Lightning® decal, specialized Lightning® graphic on sunroof, Luxe black premium Nirvana leather seating surfaces, power-deployable running boards with Agate Black accent, soft-shell black tonneau cover, serialized limited edition badging.	-	-	-	-	O

WARRANTY

Bumper-to-Bumper	3 years/36,000 miles²
Electric vehicle unique component	8 years/100,000 miles³
Aluminum body panel	5 years/unlimited miles²
Paint adhesion	5 years/unlimited miles²
Roadside assistance	5 years/60,000 miles²

²Whichever comes first. See your dealer for limited-warranty details.

³Battery is covered for 8 years or 100,000 miles, whichever comes first, retaining a minimum of 70 percent of its original capacity over that period.

Some features and trims may not be available. Contact your dealer for more information.

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